## RAW SEQUENCE LISTING



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: /0/SSS, 735A
Source: //Fwo
Date Processed by STIC: 2/27/07

# ENTERED



**IFWO** 

RAW SEQUENCE LISTING DATE: 02/27/2007
PATENT APPLICATION: US/10/555,735A TIME: 15:05:50

Input Set: N:\efs\02\_27\_07\10555735a\_efs\INTM01901USseqlist2.txt
Output Set: N:\CRF4\02272007\J555735A.raw

```
4 <110> APPLICANT: Blatt, Lawrence M.
     6 <120> TITLE OF INVENTION: SYNTHETIC CHEMOKINE RECEPTOR LIGANDS AND
             METHODS OF USE THEREOF
     9 <130> FILE REFERENCE: INTM-033WO
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/555,735A
C--> 12 <141> CURRENT FILING DATE: 2005-11-07
    14 <150> PRIOR APPLICATION NUMBER: 60/471,404
    15 <151> PRIOR FILING DATE: 2003-05-16
    17 <160> NUMBER OF SEQ ID NOS: 20
    19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
    21 <210> SEQ ID NO: 1
    22 <211> LENGTH: 77
    23 <212> TYPE: PRT
    24 <213> ORGANISM: Artificial Sequence
    26 <220> FEATURE:
    27 <223> OTHER INFORMATION: consensus IP-10 sequence
    29 <400> SEQUENCE: 1
    30 Val Pro Leu Ser Arg Thr Gly Arg Cys Thr Cys Ile Ser Ile Ser Asn
                        5
    32 Gln Pro Val Asn Pro Arg Ser Leu Glu Lys Leu Glu Ile Ile Pro Pro
                   20
                                        25
    34 Ser Gln Phe Cys Pro Lys Ile Glu Ile Ile Ala Thr Leu Lys Lys Asn
    36 Gly Glu Gln Arg Cys Leu Asn Pro Glu Ser Lys Ala Ile Lys Asn Leu
                                55
    38 Ile Lys Lys Val Ser Arg Glu Met Ser Lys Lys Ser Pro
    39 65
                            70
                                                75
    42 <210> SEQ ID NO: 2
    43 <211> LENGTH: 74
    44 <212> TYPE: PRT
    45 <213> ORGANISM: Artificial Sequence
    47 <220> FEATURE:
    48 <223> OTHER INFORMATION: consensus I-TAC sequence
    50 <400> SEQUENCE: 2
    51 Phe Pro Met Phe Arg Arg Gly Arg Cys Leu Cys Ile Ser Pro Gly Val
    53 Lys Ala Val Lys Val Ala Ser Leu Glu Lys Leu Ser Ile Met Tyr Pro
                   20
    55 Ser Asn Asn Cys Asp Lys Ile Glu Ile Ile Ala Thr Leu Lys Lys Asn
                                    40
    57 Gly Gly Gln Arg Cys Leu Asn Pro Lys Ser Lys Gln Ala Lys Leu Leu
```

59 Ile Lys Lys Val Glu Arg Lys Lys Asn Phe

Input Set: N:\efs\02\_27\_07\10555735a\_efs\INTM01901USseqlist2.txt
Output Set: N:\CRF4\02272007\J555735A.raw

```
70
60 65
63 <210> SEQ ID NO: 3
64 <211> LENGTH: 104
65 <212> TYPE: PRT
66 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
69 <223> OTHER INFORMATION: consensus Mig sequence
71 <400> SEQUENCE: 3
72 Thr Pro Val Val Arg Lys Gly Arg Cys Ser Cys Ile Ser Thr Asn Gln
73 1
74 Gly Thr Val His Leu Gln Ser Leu Glu Lys Leu Lys Ile Phe Ala Pro
                                   25
76 Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile Ala Thr Leu Lys Lys Asn
77
78 Gly Val Gln Arg Cys Leu Asn Pro Asp Ser Lys Asp Val Lys Glu Leu
80 Ile Lys Lys Trp Glu Lys Gln Val Ser Gln Lys Lys Lys Gln Lys Asn
                       70
82 Gly Lys Lys His Gln Lys Lys Lys Val Leu Lys Val Arg Lys Val Gln
84 Arg Ser Arg Gln Lys Lys Thr Thr
85
               100
88 <210> SEQ ID NO: 4
89 <211> LENGTH: 10
90 <212> TYPE: PRT
91 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: epitope tag
96 <400> SEQUENCE: 4
97 Cys Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
98 1
101 <210> SEQ ID NO: 5
102 <211> LENGTH: 8
103 <212> TYPE: PRT
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: epitope tag
109 <400> SEQUENCE: 5
110 Asp Tyr Lys Asp Asp Asp Lys
111 1
114 <210> SEQ ID NO: 6
115 <211> LENGTH: 11
116 <212> TYPE: PRT
117 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: epitope tag
122 <400> SEQUENCE: 6
123 Cys Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
124 1
```

Input Set: N:\efs\02\_27\_07\10555735a\_efs\INTM01901USseqlist2.txt
Output Set: N:\CRF4\02272007\J555735A.raw

```
127 <210> SEQ ID NO: 7
     128 <211> LENGTH: 5
     129 <212> TYPE: PRT
     130 <213> ORGANISM: Artificial Sequence
     132 <220> FEATURE:
     133 <223> OTHER INFORMATION: protease cleavage site
     135 <400> SEQUENCE: 7
     136 Asp Asp Asp Lys
     137 1
     140 <210> SEQ ID NO: 8
     141 <211> LENGTH: 4
     142 <212> TYPE: PRT
     143 <213> ORGANISM: Artificial Sequence
     145 <220> FEATURE:
     146 <223> OTHER INFORMATION: protease cleavage site
     148 <400> SEQUENCE: 8
     149 Ile Glu Gly Arg
     150 1
     153 <210> SEQ ID NO: 9
     154 <211> LENGTH: 6
     155 <212> TYPE: PRT
     156 <213> ORGANISM: Artificial Sequence
     158 <220> FEATURE:
     159 <223> OTHER INFORMATION: protease cleavage site
     161 <400> SEQUENCE: 9
     162 Leu Val Pro Arg Gly Ser
     166 <210> SEQ ID NO: 10
     167 <211> LENGTH: 8
     168 <212> TYPE: PRT
     169 <213> ORGANISM: Artificial Sequence
     171 <220> FEATURE:
     172 <223> OTHER INFORMATION: protease cleavage site
     174 <400> SEQUENCE: 10
     175 His Pro Phe His Leu Val Ile His
     176 1
     179 <210> SEQ ID NO: 11
     180 <211> LENGTH: 104
     181 <212> TYPE: PRT
     182 <213> ORGANISM: Artificial Sequence
     184 <220> FEATURE:
     185 <223> OTHER INFORMATION: Consensus Sequence for IP-10, I-TAC and Mig
W--> 187 <221> NAME/KEY: VARIANT
     188 <222> LOCATION: 1, 3, 4, 6, 10, 14, 15, 16, 17, 18, 20, 21, 22, 28, 30, 31,
               34, 35, 37, 50, 57, 60, 61, 63, 68, 69, 70, 71, 72, 73,
     189
               74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87,
     190
               88, 89, 90, 91, 92, 93, 94, 96, 98, 99, 100, 103, 104
     192 <223> OTHER INFORMATION: Xaa = Any Amino Acid
W--> 194 <400> 11
```

Input Set : N:\efs\02\_27\_07\10555735a\_efs\INTM01901USseqlist2.txt
Output Set: N:\CRF4\02272007\J555735A.raw

W--> 195 Xaa Pro Xaa Xaa Arg Xaa Gly Arg Cys Xaa Cys Ile Ser Xaa Xaa 197 Xaa Xaa Val Xaa Xaa Xaa Ser Leu Glu Lys Leu Xaa Ile Xaa Xaa Pro 25 199 Ser Xaa Xaa Cys Xaa Lys Ile Glu Ile Ile Ala Thr Leu Lys Lys Asn 40 201 Gly Xaa Gln Arg Cys Leu Asn Pro Xaa Ser Lys Xaa Xaa Lys Xaa Leu 55 70 75 207 Arg Xaa Xaa Xaa Lys Lys Xaa Xaa 208 100 211 <210> SEQ ID NO: 12 212 <211> LENGTH: 98 213 <212> TYPE: PRT 214 <213 > ORGANISM: Homo sapien 216 <400> SEQUENCE: 12 217 Met Asn Gln Thr Ala Ile Leu Ile Cys Cys Leu Ile Phe Leu Thr Leu 10 219 Ser Gly Ile Gln Gly Val Pro Leu Ser Arg Thr Val Arg Cys Thr Cys 221 Ile Ser Ile Ser Asn Gln Pro Val Asn Pro Arg Ser Leu Glu Lys Leu 40 223 Glu Ile Ile Pro Ala Ser Gln Phe Cys Pro Arg Val Glu Ile Ile Ala 225 Thr Met Lys Lys Gly Glu Lys Arg Cys Leu Asn Pro Glu Ser Lys 227 Ala Ile Lys Asn Leu Leu Lys Ala Val Ser Lys Glu Met Ser Lys Arg 228 229 Ser Pro 233 <210> SEQ ID NO: 13 234 <211> LENGTH: 94 235 <212> TYPE: PRT 236 <213> ORGANISM: Homo sapien 238 <400> SEQUENCE: 13 · 239 Met Ser Val Lys Gly Met Ala Ile Ala Leu Ala Val Ile Leu Cys Ala 10 241 Thr Val Val Gln Gly Phe Pro Met Phe Lys Arg Gly Arg Cys Leu Cys 25 243 Ile Gly Pro Gly Val Lys Ala Val Lys Val Ala Asp Ile Glu Lys Ala 245 Ser Ile Met Tyr Pro Ser Asn Asn Cys Asp Lys Ile Glu Val Ile Ile 247 Thr Leu Lys Glu Asn Lys Gly Gln Arg Cys Leu Asn. Pro Lys Ser Lys

249 Gln Ala Arg Leu Ile Ile Lys Lys Val Glu Arg Lys Asn Phe

250

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Output Set: N:\CRF4\02272007\J555735A.raw

```
253 <210> SEQ ID NO: 14
254 <211> LENGTH: 125
255 <212> TYPE: PRT
256 <213> ORGANISM: homo sapien
258 <400> SEQUENCE: 14
259 Met Lys Lys Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val
261 Leu Ile Gly Val Gln Gly Thr Pro Val Val Arg Lys Gly Arg Cys Ser
263 Cys Ile Ser Thr Asn Gln Gly Thr Ile His Leu Gln Ser Leu Lys Asp
                                40
265 Leu Lys Gln Phe Ala Pro Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile
267 Ala Thr Leu Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Ala
269 Asp Val Lys Glu Leu Ile Lys Lys Trp Glu Lys Gln Val Ser Gln Lys
271 Lys Lys Gln Lys Asn Gly Lys Lys His Gln Lys Lys Lys Val Leu Lys
              100
                                    105
273 Val Arg Lys Ser Gln Arg Ser Arg Gln Lys Lys Thr Thr
          115
                                120
277 <210> SEQ ID NO: 15
278 <211> LENGTH: 98
279 <212> TYPE: PRT
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: hybrid CXCR3 ligand
285 <400> SEQUENCE: 15
286 Met Lys Lys Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val
288 Leu Ile Gly Val Gln Gly Phe Pro Met Phe Lys Arg Gly Arg Cys Leu
                                    25
290 Cys Ile Gly Pro Gly Val Lys Pro Val Asn Pro Arg Ser Leu Glu Lys
                                40
292 Leu Glu Ile Ile Pro Ala Ser Gln Phe Cys Pro Arg Ile Glu Ile Ile
                            55
294 Ala Thr Leu Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Lys
                       70
                                            75
296 Gln Ala Arg Leu Ile Ile Lys Lys Val Ser Lys Glu Met Ser Lys Arg
297
298 Ser Pro
302 <210> SEQ ID NO: 16
303 <211> LENGTH: 124
304 <212> TYPE: PRT
305 <213> ORGANISM: Artificial Sequence
307 <220> FEATURE:
308 <223> OTHER INFORMATION: hybrid CXCR3 ligand
310 <400> SEQUENCE: 16
```

311 Met Asn Gln Thr Ala Ile Leu Ile Cys Cys Leu Ile Phe Leu Thr Leu

RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 02/27/2007

PATENT APPLICATION: US/10/555,735A

TIME: 15:05:51

Input Set : N:\efs\02\_27\_07\10555735a\_efs\INTM01901USseqlist2.txt

Output Set: N:\CRF4\02272007\J555735A.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. \1,3,4,6,-10,14,15,16,17,18,20,21,22,28,30,31,34,35,37,50 Seq#:11; Xaa Pos. \57\60,61,63,68\69,70,71\72,73\74\75\76\77\78\77\90,80\81,82 Seq#:11; Xaa Pos. \83,84,85,86\87,88,89,90\-91\92,93\94,96\98,98,99\100\7103\104

#### VERIFICATION SUMMARY

DATE: 02/27/2007 TIME: 15:05:51

PATENT APPLICATION: US/10/555,735A

Input Set : N:\efs\02\_27\_07\10555735a\_efs\INTM01901USseqlist2.txt

Output Set: N:\CRF4\02272007\J555735A.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:187 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:194 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:11

L:195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0

M:341 Repeated in SeqNo=11